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L17: Entry 2 of 5 File: USPT Nov 3, 1992

DOCUMENT-IDENTIFIER: US 5160418 A
TITLE: Enzyme electrodes and improvements in the manufacture thereof

DEPR:
As already indicated, the invention relates particularly to glucose oxidase electrodes, i.e. in which the immobilised enzyme is a glucose oxidase, but it will be apparent that other oxidoreductases can be used, although not always with equivalent effect. This is not necessarily due to any inherent ineffectiveness of the enzyme, but to other factors. For example, in the determination of uric acid using uricase, the uric acid substrate itself undergoes electrochemical oxidation at the base electrode, thus largely masking any effect from the enzyme. However, other suitable oxidoreductases include lactate oxidase, galactose oxidase, cholesterol oxidase and other peroxide producing enzymes as well as combinations of immobilised enzymes, including combinations of a non-oxidase and an oxidase, the first acting on a substrate of interest to produce an oxidisable substrate for the oxidase, the latter acting on the oxidisable product to produce a measurable current which is proportional to the concentration of the substrate of interest. One such combination is the combination of beta-galactosidase and glucose oxidase (for the quantitative determination of lactose), or the combination of a beta-glucan depolymerising enzyme, beta-glucosidase and glucose oxidase (for the determination of beta-glucans).

WEST

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L19: Entry 1 of 4 File: USPT Jul 27, 1993

DOCUMENT-IDENTIFIER: US 5231028 A
TITLE: Immobilized enzyme electrodes

DEPR:
As already indicated, the invention relates particularly to glucose oxidase electrodes, i.e. in which the immobilised enzyme is a glucose oxidase, but it will be apparent that other oxidoreductases can be used, although not always with equivalent effect. This is not necessarily due to any inherent ineffectiveness of the enzyme, but to other factors. For example, in the determination of oxalic acid using oxalate oxidase the oxalic acid substrate itself undergoes electrochemical oxidation at the base electrode, thus largely masking any effect from the enzyme. However, other suitable oxidoreductases include lactate oxidase, galactose oxidase, cholesterol oxidase and other peroxide producing enzymes as well as combinations of immobilised enzymes, including combinations of a non-oxidase and an oxidase, the first acting on a substrate of interest to produce an oxidisable substrate for the oxidase, the latter acting on the oxidisable product to produce a measurable current which is proportional to the concentration of the substrate of interest. One such combination is the combination of beta-galactosidase and glucose oxidase (for the quantitative determination of lactose), or the combination of a beta-glucan depolymerising enzyme, beta-glucosidase and glucose oxidase (for the determination of beta-glucans).

WEST

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L17: Entry 4 of 5 File: USPT Mar 20, 1984

DOCUMENT-IDENTIFIER: US 4438067 A
TITLE: Test strips for analyzing dissolved substances

DEPR:
The presence of catalase in the milk of ruminant is a sign of disease and a simple method for detecting the enzyme helps in detecting such diseases at an early easily curable stage. The reactions involved in the present strip are the following splitting the milk lactose into galactose with galactosidase, oxidizing the galactose in the catalysis presence of galactose oxidase, thus producing hydrogen peroxide, decomposing the H.sub.2 O.sub.2 into water and O.sub.2 by the catalase possibly present and ascertaining the residual H.sub.2 O.sub.2 present by its action on o-tolidine in the presence of peroxidase (same color reaction as in the previous Examples).

L5: Entry 38 of 42 File: USPT Mar 9, 1982

DOCUMENT-IDENTIFIER: US 4318984 A
**** See image for Certificate of Correction ****
TITLE: Stabilized composition, test device, and method for detecting the presence of a sugar in a test sample

Brief Summary Text (23):
The present composition lends itself to a variety of sugar analyses, and can thus be tailored to fill a myriad of needs. Depending on the particular sugar to be assayed, an oxidase is selected which will provide H.sub.2 O.sub.2 as a reaction product upon oxidation of the sugar. The more specific the oxidase is for its sugar substrate, the more specific will be the resultant assay. As stated supra, this enzymatic technology is useful for many sugars, including glucose, fructose, lactose, galactose, maltose, mannose and the pentoses. Thus, an oxidase specific for the sugar, such as galactose oxidase or glucose oxidase, is utilized. These enzymes are known, as are techniques for their isolation.

L5: Entry 15 of 42 File: USPT Aug 6, 2002

DOCUMENT-IDENTIFIER: US 6428793 B1
TITLE: Lipoglycan compositions and methods of treating parasitic infections

Detailed Description Text (16):
The .beta.-1,4-galactose linkage was confirmed using immobilized ricin lectin. The lipoglycan radiolabeled with galactose oxidase/NaB[.sup.3 H].sub.4 was applied to a column (1.times.2 cm) of Ricinus communis agglutinin-1 (RCA-1). RCA-1 lectin covalently linked to an agarose bead (EY Laboratories, Inc.) equilibrated with PBS, pH 7.4. The loaded column was first washed with PBS and then with 0.2 M lactose. PBS containing 0.1% Triton X-100 was used to flush the column. Fractions (1.2 ml) were collected and measured for radioactivity. The lipoglycan (LG) was retained on the column and released only by the solution containing lactose, confirming the presence of the .beta.-1,4-galactose linkage.

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L5: Entry 14 of 42 File: USPT Aug 13, 2002

DOCUMENT-IDENTIFIER: US 6433161 B1
TITLE: Galactosylated hydroxyalkyl polysaccharides

Detailed Description Text (34):
The oxidase-chromogen reagent was prepared by mixing 0.5 ml of galactose oxidase (70 units), 0.5 ml of horseradish peroxidase (100 mg/l), 0.5 ml of o-toluidine (200 mg/l) and 0.5 ml of the substrate solution (the reaction concentration was less than 1.39.times.10.sup.-4 M, i.e., 278 mmoles in 2 ml of solution), and then placing the mixture in an incubator at 30.degree. C. for 1 hour. Maximum chromogenesis took place within 60 minutes. The color that developed was read at 420 nm. To calibrate the test, a plot of absorbance at 420 nm versus known amounts of lactose was prepared. Comparison of the test results with the calibration plot gave values for the amount of bound galactose in the test materials.

L5: Entry 11 of 42 File: USPT May 6, 2003

DOCUMENT-IDENTIFIER: US 6558669 B1
TITLE: Stable radioiodine conjugates and methods for their synthesis

Brief Summary Text (12):
The prior art has addressed the issue of residualizing iodine labels by using non-metabolizable sugars to which an iodinatable group is attached. An iodinatable group such as tyramine is reductively coupled to the carbohydrate, so that there is no metabolizable peptide bond between tyramine and the sugar entity. There are two main problems encountered with these prior art methods. These are in the antibody-coupling steps. One method, that of Strobel et al. (see above), uses a carbohydrate-adduct derived from lactose, and couples proteins and antibodies to the same by first oxidizing the galactose portion of such adducts with galactose oxidase. Usually poor overall yield (3-6%) is obtained, as described by Stein et al. Cancer Research, 55: 3132-3139, (1995). Furthermore, lactose is an inefficient substrate for galactose oxidase. In examining a number of galactose-containing carbohydrate derivatives for their ability to be oxidized by this enzyme, Avigad et al. (J. Biol. Chem 237: 2736-2743, (1962)), determined that lactose had less than half the affinity of D-galactose for galactose oxidase, and was oxidized fifty times slower compared to galactose. This inefficient step therefore contributes to overall reduced radioisotope incorporation into antibodies.

Brief Summary Text (30):
The present invention solves the problems of poor labeling efficiency and aggregate formation reported in the carbohydrate-based prior art in two general ways. In the first way, a new method is provided that allows oxidation of the galactose-containing carbohydrate-tyramine (or D-tyrosine) adduct by galactose oxidase. The invention achieves this by using melibiose as the carbohydrate in the adduct. The affinity of melibiose for galactose oxidase is five times as high as that of galactose and ten-times as high compared to the affinity of lactose for galactose oxidase. Furthermore, melibiose is oxidized at a rate comparable to galactose. Consequently, this method of the invention enhances the overall process yield obtained in the oxidation step. Overall incorporations of 18.7-20.7% (see Example-9) have been achieved for the radioiodination of antibody using radioiodinated and oxidized (oxidation using galactose oxidase) dimelibiitoltyramine of the present invention. These incorporations are five-to-ten fold higher than yields observed in the radioiodination of the same antibody, using radioiodinated and oxidized dilactitoltyramine. An advantage of the present invention in this regard lies in utilizing a substrate (dimelibiitoltyramine) which is oxidized readily by galactose oxidase. An additional invention in this context involves the use of hydrazide-appended antibodies which results in enhanced yield in the step of reductive coupling of carbohydrate addend to proteins.

L5: Entry 39 of 42 File: USPT Sep 2, 1980

DOCUMENT-IDENTIFIER: US 4220503 A
TITLE: Stabilization of activated galactose oxidase enzyme

Brief Summary Text (11):
Galactose oxidase (D-galactose: O.sub.2 oxidoreductose, EC 1.1.3.9) is one of the enzymes which it would be desirable to immobilize in an enzyme electrode in view of its ability to ultimately produce hydrogen peroxide from galactose, lactose and a number of other substances. Galactose measurement is important in the preliminary diagnosis of galactosemia and galactose intolerance. Also, research currently being conducted suggests that galactose may be an important alterntive energy source in premature infants and that the metabolism of galactose may impart some degree of regulation to blood glucose levels of diabetic infants.

WEST

End of Result Set

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L13: Entry 4 of 4 File: USPT Mar 20, 1984

DOCUMENT-IDENTIFIER: US 4438067 A
TITLE: Test strips for analyzing dissolved substances

DEPR:
The presence of catalase in the milk of ruminant is a sign of disease and a simple method for detecting the enzyme helps in detecting such diseases at an early easily curable stage. The reactions involved in the present strip are the following splitting the milk lactose into galactose with galactosidase, oxidizing the galactose in the catalysis presence of galactose oxidase, thus producing hydrogen peroxide, decomposing the H.sub.2 O.sub.2 into water and O.sub.2 by the catalase possibly present and ascertaining the residual H.sub.2 O.sub.2 present by its action on o-tolidine in the presence of peroxidase (same color reaction as in the previous Examples).

WEST

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L13: Entry 19 of 25 File: USPT Jul 10, 1984

DOCUMENT-IDENTIFIER: US 4458686 A
TITLE: Cutaneous methods of measuring body substances

DETL:
TABLE

Enzyme	Number	Source	Typical Substrates
Glycollate oxidase	1.1.3.1	spinach	glycollate rat liver L-lactate D-lactate (+)-mandalate Lactate oxidase 1.1.3.2 M. phlei L-lactate Glucose oxidase 1.1.3.4 Aspergillus niger .beta.-D-glucose Penicillium amagasakienses 2-dioxy-D-glucose honey (bee) 6-dioxy-6-fluoro-D-glucose Penicillium notatum 6-methyl-D-glucose Hexose oxidase 1.1.3.5 .beta.-D-glucose D-galactose D-mannose L-Gulonolactone oxidase 1.1.3.8 rat liver L-gulono-.lambda.-lactone L-galactonolactono D-manonolactone D-altronolactone Galactose oxidase 1.1.3.9 Dactylium dendroides D-galactose Polyporus circinatus stachyose lactose L-2-Hydroxyacid oxidase 1.1.3.a hog renal cortex L-2-hydroxyacid Aldehyde oxidase 1.2.3.1 rabbit liver formaldehyde pig liver acetaldehyde Xanthine oxidase 1.2.3.2 bovine milk purine porcine liver hypoxanthine benzaldehyde xanthine Pyruvate oxidase 1.2.3.3 pyruvate requires thiamine phosphate Oxalate oxidase 1.2.3.4 oxalate Dihydro-orotate-dehydrogenase 1.3.3.1 Zymobacterium oroticum L-4, 5-dihydro-orotate NAD D-Aspartate oxidase 1.4.3.1 rabbit kidney D-aspartate D-glutamate L-Amino-acid oxidase 1.4.3.2 diamond rattlesnake L-methionine cotton mouth moccasin L-phenylalanine rat kidney 2-hydroxy acids L-lactate D-Amino acid oxidase 1.4.3.3 hog kidney D-alanine D-valine D-proline Monoamine oxidase 1.4.3.4 beef plasma monoamine placenta benzylamine octylamine Pyridoxamine phosphate oxidase 1.4.3.5 rabbit liver pyridoxamine phosphate Diamine oxidase 1.4.3.6 bovine plasma diamines pea seedlings spermidine procine plasma tyramine Sarcosine oxidase 1.5.3.1 Macaca mulatta sarcosine rat liver metochondria N--Methyl-L-amino acid oxidase 1.5.3.2 N--methyl-L-amino acids Spermine oxidase 1.5.3.3 Neisseria perflava spermine Serratia marcescens spermidine Nitroethane oxidase 1.7.3.1 nitroethane aliphatic nitro compounds Urate oxidase 1.7.3.3 hog liver urate ox kidney Sulfite oxidase 1.8.3.1 beef liver sulfite Alcohol oxidase Basidiomycetes ethanol and methanol Carbohydrate oxidase Basidiomycetes D-glucose Polyporus obtusus D-glucopyranose D-xylopyranose 1-sorbose .delta.-D-gluconolactone NADH oxidase beef heart NADH mitochondria Malate oxidase 1.1.3.2 L-malate Cholesterol oxidase 1.1.3.6 cholesterol N--Acetylindoxyl oxidase 1.7.3.2 N--acetylindoxyl Thiol oxidase 1.8.3.2 R: CR-SH Ascorbate oxidase 1.10.3.3 squash L-ascorbate			

WEST

Generate Collection

L13: Entry 21 of 25 File: USPT Mar 9, 1982

DOCUMENT-IDENTIFIER: US 4318984 A
TITLE: Stabilized composition, test device, and method for detecting the presence of a sugar in a test sample

BSPR:
The present composition lends itself to a variety of sugar analyses, and can thus be tailored to fill a myriad of needs. Depending on the particular sugar to be assayed, an oxidase is selected which will provide H.sub.2 O.sub.2 as a reaction product upon oxidation of the sugar. The more specific the oxidase is for its sugar substrate, the more specific will be the resultant assay. As stated supra, this enzymatic technology is useful for many sugars, including glucose, fructose, lactose, galactose, maltose, mannose and the pentoses. Thus, an oxidase specific for the sugar, such as galactose oxidase or glucose oxidase, is utilized. These enzymes are known, as are techniques for their isolation.

WEST

Generate Collection

L13: Entry 24 of 25 File: USPT Dec 16, 1975

DOCUMENT-IDENTIFIER: US 3926732 A
TITLE: Method for assaying catalase in milk and other liquids

BSPR:
The most favorable approach, however, is to mix the milk or other liquids of biological origin with an enzyme of synergistic enzymes capable of releasing hydrogen peroxide in the presence of a sugar available in the liquid. Such generation of hydrogen peroxide can be obtained from the lactose in the milk in conjunction with the enzyme galactose oxidase.

BSPR:
However, galactose oxidase is basically specific to free galactose and reacts only slowly with lactose. It is therefore to advantage to add the enzyme .beta.-galactoxidase, which splits lactose into galactose and glucose. Instead of galactose oxidase, or in conjunction with that enzyme, the enzyme glucose oxidase, which is specific to the glucose obtained by the splitting reaction, can be used together with .beta.-galactoxidase.

BSPR:
A test cell is fitted with two compartments, one of which is permanently closed by a semipermeable membrane and contains 1 - 10 u of galactose oxidase (as counted on lactose as the substrate). A small amount, 0.5 - 1 ml, of the liquid to be analyzed for catalase is added in the open compartment of the test cell. A test paper, containing peroxidase and a leuko dye as described in Example 2 (below), is arranged in the liquid in such a way that its nearest part remains at a fixed distance of a few mm from the semipermeable membrane. Various sensitivities to catalase can be attained, depending on the amount of galactose oxidase, the sample volume, and the fixed distance mentioned. With an arrangement as described, it has been possible to carry out semi-quantitative determinations of catalase concentrations of approximately 2 - 20 U/ml by observing the development of color in the test paper, which is maximum after a few minutes in the absence of catalase but attains gradually weaker intensity the higher the catalase concentration.

BSTL:
Solution 1 Peroxidase (EC 1.11.1.7, RZ 0.6) 0.5 mg/ml o-tolidine 0.5 mg/ml buffer salt yielding an almost neutral pH, such as phosphate Solution 2 Galactose oxidase (EC 1.1.3.9, about 20 U/mg, with lactose as substrate, non-catalase) 0.5 - 5 mg/ml buffer salt as above

WEST

Generate Collection

L13: Entry 23 of 25 File: USPT Sep 13, 1977

DOCUMENT-IDENTIFIER: US 4048018 A
TITLE: Method of carrying out enzyme catalyzed reactions

DEPR:
Other important applications of fluidized beds of immobilized enzymes are: the use of immobilized .alpha.-galactosidase or melibiase (which can be obtained from the fungus Mortierella vinaceae) for hydrolyzing sugar raffinose in beet sugar molasses (this raffinose forms in beets during cold weather and retards the rate of sucrose precipitation from the beet sugar molasses); the use of the immobilized enzyme aminoacylase to selectively hydrolyze acryl-L-amino acid within a mixture of acyl-DL-amino acid thereby facilitating the downstream separation of the L-amino acid from the mixture according to the process disclosed by Chibata et al. in U.S. Pat. No. 3,386,888; the use of immobilized aspartase to catalyze the addition of ammonia to fumaric acid thereby producing L-aspartic acid; the use of immobilized penicillin amidase to hydrolyze penicillin to 6-aminopenicillanic acid, a precursor of various important penicillin derivatives; the use of immobilized glucose oxidase and catalase (preferably within the same reactor or even immobilized together on the same fluidizable particles) to produce gluconic acid by the oxidation of glucose using oxygen; the use of immobilized sulfhydryl oxidase to catalyze the oxidation of sulfhydryl groups in milk by oxygen thereby improving the temperature stability of the milk; the use of immobilized pectinases for clarifying fruit juices and alcoholic beverages; the use of immobilized invertase to hydrolyze sucrose to invert sugar; the use of immobilized isoamylase and .alpha.-amylase to hydrolyze starch and starch dextrins to maltose; the use of immobilized galactose oxidase to oxidize galactose to galactonic acid; the use of immobilized galactose oxidase and lactase (preferably within the same reactor or even immobilized on the same fluidizable particle) to convert lactose in milk, milk products, and cheese whey to a mixture of glucose and galactonic acid; the use of immobilized .beta.glucanases to reduce beer viscosity; the use of immobilized polyphenol oxidase to oxidize polyphenols in beer wort; the use of immobilized papain in the chill-proofing of beer.

WEST

Generate Collection

L17: Entry 3 of 5 File: USPT Nov 13, 1990

DOCUMENT-IDENTIFIER: US 4970145 A
TITLE: Immobilized enzyme electrodes

DEPR:
As already indicated, the invention relates particularly to glucose oxidase electrodes, i.e. in which the immobilised enzyme is a glucose oxidase, but it will be apparent that other oxidoreductases can be used, although not always with equivalent effect. This is not necessarily due to any inherent ineffectiveness of the enzyme, but to other factors. For example, in the determination of oxalic acid using oxalate oxidase the oxalic acid substrate itself undergoes electrochemical oxidation at the base electrode, thus largely masking any effect from the enzyme. However, other suitable oxidoreductases include lactate oxidase, galactose oxidase, cholesterol oxidase and other peroxide producing enzymes as well as combinations of immobilised enzymes, including combinations of a nonoxidase and an oxidase, the first acting on a substrate of interest to produce an oxidisable substrate for the oxidase, the latter acting on the oxidisable product to produce a measurable current which is proportional to the concentration of the substrate of interest. One such combination is the combination of beta-galactosidase and glucose oxidase (for the quantitative determination of lactose), or the combination of a beta-glucan depolymerising enzyme, beta-glucosidase and glucose oxidase (for the determination of beta-glucans).

End of Result Set

Generate Collection

L19: Entry 4 of 4 File: USPT Mar 20, 1984

DOCUMENT-IDENTIFIER: US 4438067 A
TITLE: Test strips for analyzing dissolved substances

DEPR:
The presence of catalase in the milk of ruminant is a sign of disease and a simple method for detecting the enzyme helps in detecting such diseases at an early easily curable stage. The reactions involved in the present strip are the following splitting the milk lactose into galactose with galactosidase, oxidizing the galactose in the catalysis presence of galactose oxidase, thus producing hydrogen peroxide, decomposing the H.sub.2 O.sub.2 into water and O.sub.2 by the catalase possibly present and ascertaining the residual H.sub.2 O.sub.2 present by its action on o-tolidine in the presence of peroxidase (same color reaction as in the previous Examples).

WEST

Generate Collection

L18: Entry 11 of 13 File: USPT Sep 2, 1980

DOCUMENT-IDENTIFIER: US 4220503 A
TITLE: Stabilization of activated galactose oxidase enzyme

BSPR:
Galactose oxidase (D-galactose: O.sub.2 oxidoreductose, EC 1.1.3.9) is one of the enzymes which it would be desirable to immobilize in an enzyme electrode in view of its ability to ultimately produce hydrogen peroxide from galactose, lactose and a number of other substances. Galactose measurement is important in the preliminary diagnosis of galactosemia and galactose intolerance. Also, research currently being conducted suggests that galactose may be an important alterntive energy source in premature infants and that the metabolism of galactose may impart some degree of regulation to blood glucose levels of diabetic infants.

WEST

Generate Collection

L18: Entry 10 of 13 File: USPT Mar 20, 1984

DOCUMENT-IDENTIFIER: US 4438067 A
TITLE: Test strips for analyzing dissolved substances

DEPR:
The presence of catalase in the milk of ruminant is a sign of disease and a simple method for detecting the enzyme helps in detecting such diseases at an early easily curable stage. The reactions involved in the present strip are the following splitting the milk lactose into galactose with galactosidase, oxidizing the galactose in the catalysis presence of galactose oxidase, thus producing hydrogen peroxide, decomposing the H.sub.2 O.sub.2 into water and O.sub.2 by the catalase possibly present and ascertaining the residual H.sub.2 O.sub.2 present by its action on o-tolidine in the presence of peroxidase (same color reaction as in the previous Examples).

WEST

Generate Collection

L18: Entry 12 of 13 File: USPT Dec 16, 1975

DOCUMENT-IDENTIFIER: US 3926732 A
TITLE: Method for assaying catalase in milk and other liquids

BSPR:
The most favorable approach, however, is to mix the milk or other liquids of biological origin with an enzyme of synergistic enzymes capable of releasing hydrogen peroxide in the presence of a sugar available in the liquid. Such generation of hydrogen peroxide can be obtained from the lactose in the milk in conjunction with the enzyme galactose oxidase.

WEST

End of Result Set

Generate Collection

L11: Entry 1 of 1 File: DWPI May 17, 2000

DERWENT-ACC-NO: 1999-131751
DERWENT-WEEK: 200028

TITLE: A dough and bread improving composition comprising a galactose oxidase and a substrate for it - useful for improving the rheological characteristics of flour dough with a dough strengthening effect, without stickiness and/or slackness

INVENTOR: ROUAU, X; SCHRODER, M ; SOE, J B

PATENT-ASSIGNEE:

ASSIGNEE	CODE
DANISCO AS	DANIN

PRIORITY-DATA:

1997US-0053451	July 22, 1997
1997DK-0000878	July 18, 1997

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
EP 999752 A1	May 17, 2000	E	000	A21D008/04
WO 9903351 A1	January 28, 1999	E	041	A21D008/04
AU 9883347 A	February 10, 1999	N/A	000	A21D008/04

DESIGNATED-STATES: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-NO
EP 999752A1	July 16, 1998	1998EP-0933577	N/A
EP 999752A1	July 16, 1998	1998WO-DK00335	N/A
EP 999752A1	N/A	WO 9903351	Based on
WO 9903351A1	July 16, 1998	1998WO-DK00335	N/A
AU 9883347A	July 16, 1998	1998AU-0083347	N/A
AU 9883347A	N/A	WO 9903351	Based on

INT-CL (IPC): A21D 8/04; A23L 1/16

ABSTRACTED-PUB-NO: WO 9903351A
BASIC-ABSTRACT:

A dough and bread improving composition comprises (a) an enzyme having galactose oxidase activity, and (b) an oxidisable substrate for (a) and/or an enzyme which can convert a compound into this substrate. Also claimed is a method of preparing a flour dough.

USE - The composition is useful for improving the rheological characteristics of flour dough with a dough strengthening effect, without stickiness and/or slackness

ADVANTAGE - Any type of flour dough can be used, e.g. wheat flour based bread products, noodle products, alimentary paste product, etc.

CHOSEN-DRAWING: Dwg.0/4

TITLE-TERMS: DOUGH BREAD IMPROVE COMPOSITION COMPRISE GALACTOSE OXIDASE SUBSTRATE USEFUL IMPROVE RHEOLOGICAL CHARACTERISTIC FLOUR DOUGH DOUGH STRENGTH EFFECT STICKY SLACK

DERWENT-CLASS: D11 D16

CPI-CODES: D01-B01; D01-B02A; D05-A02A;

SECONDARY-ACC-NO:
CPI Secondary Accession Numbers: C1999-038439

WEST

End of Result Set

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L7: Entry 11 of 11 File: DWPI May 29, 1974

DERWENT-ACC-NO: 1974-47183V
DERWENT-WEEK: 197426

TITLE: Catalase determination in biological fluids, pref milk - by use of a substance which forms hydrogen peroxide in the presence of the fluid, esp for diagnosis of mastitis

PATENT-ASSIGNEE:

ASSIGNEE	CODE
ALFA LAVAL AB	ALFA
ALFA LAVAL SPA	ALFA

PRIORITY-DATA: 1973SE-0010077 (July 19, 1973), 1973SE-0002201 (February 16, 1973)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
BE 810903 A	May 29, 1974		000	
AT 7401204 A	March 15, 1978		000	
CA 1013656 A	July 12, 1977		000	
CH 591696 A	September 30, 1977		000	
DD 109951 A	November 20, 1974		000	
DE 2407046 A	September 5, 1974		000	
DE 2407046 B	June 23, 1977		000	
FI 7400426 A	October 31, 1974		000	
FR 2218566 A	October 18, 1974		000	
GB 1445793 A	August 11, 1976		000	
IL 44125 A	April 29, 1977		000	
IT 1027519 B	December 20, 1978		000	
JP 50025293 A	March 17, 1975		000	
NL 7402118 A	August 20, 1974		000	
SE 7302201 A	August 19, 1974		000	
SE 7310077 A	February 17, 1975		000	
SU 622423 A	August 16, 1978		000	
US 3926732 A	December 16, 1975		000	
ZA 7400849 A	August 8, 1975		000	

A INT-CL (IPC): C12D 13/10; G01M 0/00; G01N 31/22; G01N 33/16

ABSTRACTED-PUB-NO: BE 810903A
BASIC-ABSTRACT:

Catalase in milk or other liq. (pref. biological) is qualitatively or quantitatively determined by addn. of a reagent contg. a substance, or synergistic mixt. of substancesa, which form H2O2 in the presence of a substance contd. in the liq. being

analysed, and another reagent which gives a coloured reaction on oxidn. with H2O2, the catalase content being determined by the depth of colour obtd. The reagent which forms H2O2 may be an enzyme or synergistic mixt of enzymes, e.g. galactose-oxidase, which forms H2O2 in the presence of a sugar in the fluid; a substance, e.g. xanthine, which forms H2O2 in the presence of an enzyme in the fluid, e.g. xanthine-oxidase; or an org. or mineral peroxide or a substance which will form a peroxide. The reagent giving a coloured reaction is pref. the lenco-deriv. of a dye, e.g. o-tolidine.

TITLE-TERMS: CATALASE DETERMINE BIOLOGICAL FLUID PREFER MILK SUBSTANCE FORM HYDROGEN PEROXIDE PRESENCE FLUID DIAGNOSE MASTITIS

DERWENT-CLASS: B04 C03 D13 S02 S03 S05

CPI-CODES: B04-A05; B04-A06; B04-B02C; B04-B04D; B04-B04K; B05-C08; B10-A04; B10-B01A; B12-K04; C04-A06; C04-B02C; C04-B04D; C04-B04K; C05-C08; C10-A04; C10-B01A; C12-K04; D03-B; D03-K03;

CHEMICAL-CODES:

Chemical Indexing M1 *01*
Fragmentation Code
V800 V600 V610 V631 N100 M430 M740 M750 P831 P832 R002 M423 M902

Chemical Indexing M1 *02*
Fragmentation Code
V460 D932 J522 N100 M430 M511 M520 M530 M540 M740 M750 P831 P832 M782 R002 M412 M902

Chemical Indexing M1 *03*
Fragmentation Code
V460 D932 J522 N100 M430 M511 M520 M530 M540 M740 M750 P831 P832 M782 R002 R000 M412 M902

Chemical Indexing M1 *04*
Fragmentation Code
V800 V600 V610 V631 N100 M430 M740 M750 P831 P832 R002 R000 M423 M902

Chemical Indexing M2 *05*
Fragmentation Code
H1 M121 M111 M282 M210 M211 M231 M240 M311 M320 G100 M532 H142 H143 N100 M430 M510 M520 M540 M740 M750 P831 P832 M782 R002 R000 M414 M902

Chemical Indexing M2 *06*
Fragmentation Code
K0 M320 M280 L431 L432 M620 N100 M430 M510 M520 M530 M540 M740 M750 P831 P832 M782 R002 R000 M416 M902

Chemical Indexing M2 *07*
Fragmentation Code
A111 A940 A980 C800 C730 C101 C108 C408 C803 C802 C807 C805 C804 B720 C801 C550 B803 B831 B105 B713 N100 M430 M740 M750 P831 P832 M782 R002 R000 M411 M902

Chemical Indexing M2 *08*
Fragmentation Code
J5 M320 M280 D932 J522 N100 M430 M511 M520 M530 M540 M740 M750 P831 P832 M782 R002 R000 M412 M902

Chemical Indexing M2 *09*

L7: Entry 9 of 11 File: USPT Dec 16, 1975

DOCUMENT-IDENTIFIER: US 3926732 A
**** See image for Certificate of Correction ****
TITLE: Method for assaying catalase in milk and other liquids

Brief Summary Text (16):
The most favorable approach, however, is to mix the milk or other liquids of biological origin with an enzyme of synergistic enzymes capable of releasing hydrogen peroxide in the presence of a sugar available in the liquid. Such generation of hydrogen peroxide can be obtained from the lactose in the milk in conjunction with the enzyme galactose oxidase.

L5: Entry 41 of 42 File: USPT Dec 16, 1975

DOCUMENT-IDENTIFIER: US 3926732 A
**** See image for Certificate of Correction ****
TITLE: Method for assaying catalase in milk and other liquids

Brief Summary Text (16):
The most favorable approach, however, is to mix the milk or other liquids of biological origin with an enzyme of synergistic enzymes capable of releasing hydrogen peroxide in the presence of a sugar available in the liquid. Such generation of hydrogen peroxide can be obtained from the lactose in the milk in conjunction with the enzyme galactose oxidase.

Brief Summary Text (17):
However, galactose oxidase is basically specific to free galactose and reacts only slowly with lactose. It is therefore to advantage to add the enzyme .beta.-galactoxidase, which splits lactose into galactose and glucose. Instead of galactose oxidase, or in conjunction with that enzyme, the enzyme glucose oxidase, which is specific to the glucose obtained by the splitting reaction, can be used together with .beta.-galactoxidase.

Brief Summary Text (31):
A test cell is fitted with two compartments, one of which is permanently closed by a semipermeable membrane and contains 1 - 10 u of galactose oxidase (as counted on lactose as the substrate). A small amount, 0.5 - 1 ml, of the liquid to be analyzed for catalase is added in the open compartment of the test cell. A test paper, containing peroxidase and a leuko dye as described in Example 2 (below), is arranged in the liquid in such a way that its nearest part remains at a fixed distance of a few mm from the semipermeable membrane. Various sensitivities to catalase can be attained, depending on the amount of galactose oxidase, the sample volume, and the fixed distance mentioned. With an arrangement as described, it has been possible to carry out semi-quantitative determinations of catalase concentrations of approximately 2 - 20 U/ml by observing the development of color in the test paper, which is maximum after a few minutes in the absence of catalase but attains gradually weaker intensity the higher the catalase concentration.

Brief Summary Paragraph Table (2):
Solution 1 Peroxidase (EC 1.11.1.7, RZ 0.6) 0.5 mg/ml o-tolidine 0.5 mg/ml buffer salt yielding an almost neutral pH, such as phosphate Solution 2 Galactose oxidase (EC 1.1.3.9, about 20 U/mg, with lactose as substrate, non-catalase) 0.5 - 5 mg/ml buffer salt as above

WEST

Freeform Search

Database: US Patents Full-Text Database; JPO Abstracts Database; EPO Abstracts Database; Derwent World Patents Index; IBM Technical Disclosure Bulletins

Term: 11 or

Display: 20 **Documents in Display Format:** TI **Starting with Number** 1

Generate: ○ Hit List ◉ Hit Count ○ Image

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Main Menu | Show S Numbers | Edit S Numbers | Preferences

Search History

Today's Date: 11/16/2000

DB Name	Query	Hit Count	Set Name
USPT,JPAB,EPAB,DWPI,TDBD	lactose same l12	4	L13
USPT,JPAB,EPAB,DWPI,TDBD	l3 same l11	105	L12
USPT,JPAB,EPAB,DWPI,TDBD	l1 same l10 same l8	222	L11
USPT,JPAB,EPAB,DWPI,TDBD	lactose or galactose or galactan	68794	L10
USPT,JPAB,EPAB,DWPI,TDBD	l8 same l1 same l2	5	L9
USPT,JPAB,EPAB,DWPI,TDBD	hemicellulase or pentosanase or xylanase or arabinofuranosidase or mannanase or galactanase or galactosidase	13576	L8
USPT,JPAB,EPAB,DWPI,TDBD	l1 same l2	25	L7
USPT,JPAB,EPAB,DWPI,TDBD	(l1 same l2 same l4) and l3	0	L6
USPT,JPAB,EPAB,DWPI,TDBD	l1 same l2 same l3 same l4	0	L5
USPT,JPAB,EPAB,DWPI,TDBD	cellulase	6306	L4
USPT,JPAB,EPAB,DWPI,TDBD	(leavening agent) or emulsifier or (preserving agent) or (oxidizing agent) or iodate or peroxide or (ascorbic acid) or k-bromate or azodicarbonamide	285495	L3
USPT,JPAB,EPAB,DWPI,TDBD	lactose	59827	L2
USPT,JPAB,EPAB,DWPI,TDBD	galactose oxidase	784	L1

WEST

Freeform Search

Database: US Patents Full-Text Database; JPO Abstracts Database; EPO Abstracts Database; Derwent World Patents Index; IBM Technical Disclosure Bulletins

Term: 113 same 12 same 13

Display: 20 **Documents in Display Format:** TI **Starting with Number** 1

Generate: ○ Hit List ◉ Hit Count ○ Image

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Main Menu | Show S Numbers | Edit S Numbers | Preferences

Search History

Today's Date: 11/16/2000

DB Name	Query	Hit Count	Set Name
USPT,JPAB,EPAB,DWPI,TDBD	l13 same l2 same l3	4	L21
USPT,JPAB,EPAB,DWPI,TDBD	l13 same l2	13	L20
USPT,JPAB,EPAB,DWPI,TDBD	l18 and l17	4	L19
USPT,JPAB,EPAB,DWPI,TDBD	l13 same l2	13	L18
USPT,JPAB,EPAB,DWPI,TDBD	l13 same l3	5	L17
USPT,JPAB,EPAB,DWPI,TDBD	l9 same l15	1	L16
USPT,JPAB,EPAB,DWPI,TDBD	l4 same l1	785	L15
USPT,JPAB,EPAB,DWPI,TDBD	l13 and l9	0	L14
USPT,JPAB,EPAB,DWPI,TDBD	(galactose oxidase) same lactose	25	L13
USPT,JPAB,EPAB,DWPI,TDBD	l1 same l4	785	L12
USPT,JPAB,EPAB,DWPI,TDBD	l1 same l4 same l9	1	L11
USPT,JPAB,EPAB,DWPI,TDBD	l9 and l5	0	L10
USPT,JPAB,EPAB,DWPI,TDBD	dough or l6	29807	L9
USPT,JPAB,EPAB,DWPI,TDBD	l5 and lactose	44	L8
USPT,JPAB,EPAB,DWPI,TDBD	l5 and l6	0	L7
USPT,JPAB,EPAB,DWPI,TDBD	(cereal flour) or pentosan or xylan or (noodle dough) or (alimentary paste dough)	4039	L6
USPT,JPAB,EPAB,DWPI,TDBD	l1 same l2 same l3 same l4	105	L5
USPT,JPAB,EPAB,DWPI,TDBD	lactose or galactose or galactan	68794	L4
USPT,JPAB,EPAB,DWPI,TDBD	hemicellulase or pentosanase or xylanase or arabinofuranosidase or mannanase or galactanase or galactosidase	13576	L3
USPT,JPAB,EPAB,DWPI,TDBD	(leavening agent) or emulsifier or (preserving agent) or (oxidizing agent) or iodate or peroxide or (ascorbic acid) or k-bromate or azodicarbonamide	285495	L2
USPT,JPAB,EPAB,DWPI,TDBD	(galactose oxidase) or (hexose oxidase) or (l-sorbose oxidase)	835	L1

Trying 3106016892...Open

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LOGINID:ssspta1815mxw
PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
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NEWS 4	Aug 28	MEDLINE from 1958 to Date - Only on STN
NEWS 5	Sep 7	DGENE GETSIM ALERT: Similarity Current-Awareness Searching of Biosequences
NEWS 6	Sep 11	Textile Technology Digest (TEXTILETECH) now available on STN
NEWS 7	Sep 21	KKF renamed DKILIT
NEWS 8	Sep 29	The Philippines Inventory of Chemicals and Chemical Substances (PICCS) has been added to CHEMLIST
NEWS 9	Oct 27	New Extraction Code PAX now available in Derwent Files
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NEWS 11	Oct 27	Patent Assignee Code Dictionary now available in Derwent Patent Files
NEWS 12	Oct 27	Plasdoc Key Serials Dictionary and Echoing added to Derwent Subscriber Files WPIDS and WPIX

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NEWS HOURS	STN Operating Hours Plus Help Desk Availability
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Enter NEWS followed by the item number or name to see news on that specific topic.

* * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 16:10:59 ON 16 NOV 2000

=> index bioscience, chemistry

FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED
FILE 'PAPERCHEM' ACCESS NOT AUTHORIZED

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.30	0.30

INDEX 'ADISALERTS, ADISINSIGHT, AGRICOLA, AIDSLINE, ANABSTR, AQUASCI,

BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, ECHDS, BIOTECHNO, CABA,
CANCERLIT, CAPLUS, CEABA, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU,
DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 16:11:51 ON 16 NOV 2000

80 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view
search error messages that display as 0* with SET DETAIL OFF.

=> s (galactose oxidase?) or (hexose oxidase?) or (l-sorbose oxidase?)

```
         61   FILE AGRICOLA
          4   FILE AIDSLINE
         40   FILE ANABSTR
          5   FILE AQUASCI
         17   FILE BIOBUSINESS
          3   FILE BIOCOMMERCE
       1036   FILE BIOSIS
        116   FILE BIOTECHABS
        116   FILE BIOTECHDS
        244   FILE BIOTECHNO
         94   FILE CABA
        293   FILE CANCERLIT
       1337   FILE CAPLUS
         22   FILE CEABA
          1   FILE CEN
          1   FILE CIN
         39   FILE CONFSCI
 21 FILES SEARCHED...
         22   FILE DDFB
          7   FILE DDFU
         63   FILE DGENE
         22   FILE DRUGB
         17   FILE DRUGU
          3   FILE EMBAL
        690   FILE EMBASE
         89   FILE ESBIOBASE
         28   FILE FROSTI
         27   FILE FSTA
         27   FILE GENBANK
          1   FILE HEALSAFE
        105   FILE IFIPAT
        135   FILE JICST-EPLUS
          2   FILE KOSMET
        210   FILE LIFESCI
 42 FILES SEARCHED...
        837   FILE MEDLINE
          4   FILE NIOSHTIC
          5   FILE NTIS
          2   FILE PHIN
          6   FILE PROMT
        549   FILE SCISEARCH
         60   FILE TOXLINE
         74   FILE TOXLIT
        701   FILE USPATFULL
        102   FILE WPIDS
        102   FILE WPINDEX
         53   FILE BABS
         21   FILE CAOLD
          1   FILE CBNB
 63 FILES SEARCHED...
         22   FILE COMPENDEX
          1   FILE DKILIT
         16   FILE INSPEC
```

```
          5   FILE IN[redacted]YS
          1   FILE INVESTEXT
  69 FILES SEARCHED...
          6   FILE PAPERCHEM2
          3   FILE RAPRA
          1   FILE VTB

  55 FILES HAVE ONE OR MORE ANSWERS,   80 FILES SEARCHED IN STNINDEX

L1   QUE (GALACTOSE OXIDASE?) OR (HEXOSE OXIDASE?) OR (L-SORBOSE OXIDASE?)


=> s lactose? or galactose? or galactan?

        159   FILE ADISALERTS
         22   FILE ADISINSIGHT
       5661   FILE AGRICOLA
        124   FILE AIDSLINE
        924   FILE ANABSTR
        777   FILE AQUASCI
       3487   FILE BIOBUSINESS
        122   FILE BIOCOMMERCE
      36924   FILE BIOSIS
       4871   FILE BIOTECHABS
       4871   FILE BIOTECHDS
       8789   FILE BIOTECHNO
      21417   FILE CABA
       3135   FILE CANCERLIT
      62598   FILE CAPLUS
       1520   FILE CEABA
         43   FILE CEN
        146   FILE CIN
        548   FILE CONFSCI
         62   FILE CROPB
        165   FILE CROPU
       1936   FILE DDFB
       3346   FILE DDFU
       1154   FILE DGENE
       1936   FILE DRUGB
        872   FILE DRUGLAUNCH
        319   FILE DRUGMONOG2
          9   FILE DRUGNL
       4379   FILE DRUGU
        167   FILE EMBAL
      24261   FILE EMBASE
       5006   FILE ESBIOBASE
        111   FILE FOMAD
        243   FILE FOREGE
       5211   FILE FROSTI
       9884   FILE FSTA
       1125   FILE GENBANK
  37 FILES SEARCHED...
         52   FILE HEALSAFE
       3716   FILE IFIPAT
       2723   FILE JICST-EPLUS
         19   FILE KOSMET
       8108   FILE LIFESCI
          3   FILE MEDICONF
      33318   FILE MEDLINE
        137   FILE NIOSHTIC
        423   FILE NTIS
        269   FILE OCEAN
         19   FILE PHAR
          3   FILE PHIC
        121   FILE PHIN
       2541   FILE PROMT
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 20926   FILE SCISEARCH
  5778   FILE TOXLINE
 12087   FILE TOXLIT
 58448   FILE USPATFULL
  8309   FILE WPIDS
  8309   FILE WPINDEX
     2   FILE ALUMINIUM
    21   FILE APILIT
    21   FILE APILIT2
  2129   FILE BABS
  2547   FILE CAOLD
   115   FILE CBNB
     1   FILE CERAB
  1288   FILE COMPENDEX
   111   FILE DKILIT
   232   FILE INSPEC
   108   FILE INSPHYS
   344   FILE INVESTEXT
  1231   FILE IPA
    10   FILE METADEX
   275   FILE NAPRALERT
  1171   FILE PAPERCHEM2
    68   FILE RAPRA
    26   FILE RUSSCI
    55   FILE TULSA
    46   FILE TULSA2
     6   FILE USAN
   174   FILE VTB
    44   FILE WSCA

  80 FILES HAVE ONE OR MORE ANSWERS,   80 FILES SEARCHED IN STNINDEX

L2   QUE LACTOSE? OR GALACTOSE? OR GALACTAN?

=> dough? or (cereal flour?) or pentosan? or xylan? or (noodle dough?) or
(alimentary dough?)

DOUGH? IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s dough? or (cereal flour?) or pentosan? or xylan? or (noodle dough?) or
(alimentary dough?)

    85   FILE ADISALERTS
     2   FILE ADISINSIGHT
  4516   FILE AGRICOLA
    89   FILE AIDSLINE
   131   FILE ANABSTR
   193   FILE AQUASCI
  4169   FILE BIOBUSINESS
   102   FILE BIOCOMMERCE
  9767   FILE BIOSIS
  2646   FILE BIOTECHABS
  2646   FILE BIOTECHDS
  2104   FILE BIOTECHNO
  5524   FILE CABA
   241   FILE CANCERLIT
 15996   FILE CAPLUS
  1252   FILE CEABA
    57   FILE CEN
   240   FILE CIN
  18 FILES SEARCHED...
   337   FILE CONFSCI
    23   FILE CROPB
```

```
       213   FILE CR[redacted]
       144   FILE DDF[redacted]
       526   FILE DDFU
      1720   FILE DGENE
       144   FILE DRUGB
        15   FILE DRUGLAUNCH
       177   FILE DRUGMONOG2
         4   FILE DRUGNL
       564   FILE DRUGU
        39   FILE EMBAL
      3343   FILE EMBASE
      1701   FILE ESBIOBASE
       469   FILE FOMAD
       317   FILE FOREGE
      8444   FILE FROSTI
     13288   FILE FSTA
 36 FILES SEARCHED...
       823   FILE GENBANK
        28   FILE HEALSAFE
      5101   FILE IFIPAT
      3422   FILE JICST-EPLUS
         4   FILE KOSMET
      2301   FILE LIFESCI
      2608   FILE MEDLINE
        55   FILE NIOSHTIC
       334   FILE NTIS
        75   FILE OCEAN
         4   FILE PHAR
         1   FILE PHIC
       120   FILE PHIN
     13135   FILE PROMT
      7377   FILE SCISEARCH
       774   FILE TOXLINE
      1226   FILE TOXLIT
     16975   FILE USPATFULL
     14724   FILE WPIDS
 56 FILES SEARCHED...
     14724   FILE WPINDEX
        22   FILE ALUMINIUM
        87   FILE APILIT
        87   FILE APILIT2
       258   FILE BABS
      1453   FILE CAOLD
       140   FILE CBNB
         4   FILE CERAB
      1387   FILE COMPENDEX
       182   FILE DKILIT
       468   FILE INSPEC
        45   FILE INSPHYS
      5897   FILE INVESTEXT
        35   FILE IPA
        43   FILE METADEX
        52   FILE NAPRALERT
      3364   FILE PAPERCHEM2
       748   FILE RAPRA
        18   FILE RUSSCI
        44   FILE TULSA
        10   FILE TULSA2
         1   FILE USAN
 78 FILES SEARCHED...
        42   FILE VTB
        43   FILE WSCA

 79 FILES HAVE ONE OR MORE ANSWERS,    80 FILES SEARCHED IN STNINDEX

L3   QUE DOUGH? OR (CEREAL FLOUR?) OR PENTOSAN? OR XYLAN? OR (NOODLE DOUGH?)
OR
```

(ALIMENTARY [redacted] GH?)

=> s l1 (p) l2 (p) l3

```
          1   FILE AGRICOLA
          1   FILE BIOBUSINESS
          0*  FILE BIOCOMMERCE
          1   FILE BIOSIS
          0*  FILE BIOTECHABS
          0*  FILE BIOTECHDS
          0*  FILE BIOTECHNO
          2   FILE CAPLUS
          0*  FILE CEABA
          0*  FILE CIN
  21 FILES SEARCHED...
          1*  FILE ESBIOBASE
          0*  FILE FOMAD
          0*  FILE FOREGE
          3*  FILE FROSTI
          1*  FILE FSTA
          0*  FILE KOSMET
  42 FILES SEARCHED...
          0*  FILE MEDICONF
          0*  FILE NTIS
          1   FILE SCISEARCH
          5   FILE USPATFULL
          2   FILE WPIDS
          2   FILE WPINDEX
          0*  FILE ALUMINIUM
          0*  FILE APILIT
          0*  FILE APILIT2
          0*  FILE BABS
          0*  FILE CAOLD
          0*  FILE CBNB
  63 FILES SEARCHED...
          0*  FILE COMPENDEX
          0*  FILE DKILIT
          0*  FILE INSPEC
          0*  FILE INSPHYS
          0*  FILE METADEX
          0*  FILE RAPRA
          0*  FILE RUSSCI
          0*  FILE VTB
          0*  FILE WSCA

  11 FILES HAVE ONE OR MORE ANSWERS,    80 FILES SEARCHED IN STNINDEX

L4   QUE L1 (P) L2 (P) L3

=> d rank

F1            5   USPATFULL
F2            3*  FROSTI
F3            2   CAPLUS
F4            2   WPIDS
F5            2   WPINDEX
F6            1   AGRICOLA
F7            1   BIOBUSINESS
F8            1   BIOSIS
F9            1   SCISEARCH
F10           1*  ESBIOBASE
F11           1*  FSTA


=> file f1-f11
```

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	5.40	5.70

FILE 'USPATFULL' ENTERED AT 16:19:19 ON 16 NOV 2000
CA INDEXING COPYRIGHT (C) 2000 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'FROSTI' ENTERED AT 16:19:19 ON 16 NOV 2000
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FILE 'AGRICOLA' ENTERED AT 16:19:19 ON 16 NOV 2000

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FILE 'SCISEARCH' ENTERED AT 16:19:19 ON 16 NOV 2000
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FILE 'FSTA' ENTERED AT 16:19:19 ON 16 NOV 2000
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=> s l4

PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L1 (P) L2'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L2 (P) L3'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L1 (P) L2'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L2 (P) L3'
9 FILES SEARCHED...
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L1 (P) L2'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L2 (P) L3'
L5 18 L4

=> dup rem l5

PROCESSING COMPLETED FOR L5
L6 14 DUP REM L5 (4 DUPLICATES REMOVED)

=> d 1-14 ab,bib

L6 ANSWER 1 OF 14 USPATFULL
AB The present invention relates to isolated polypeptides having galactose oxidase activity and isolated nucleic acid sequences encoding the polypeptides. The invention also relates to nucleic acid constructs,

vectors, and h cells comprising the nucleic d sequences as well as
methods for producing and using the polypeptides.
AN 2000:91759 USPATFULL
TI Polypeptides having galactose oxidase activity and nucleic acids encoding same
IN Golightly, Elizabeth, Davis, CA, United States
Berka, Randy M., Davis, CA, United States
Rey, Michael W., Davis, CA, United States
PA Novo Nordisk Biotech, Inc., Davis, CA, United States (U.S. corporation)
PI US 6090604 20000718
AI US 1999-257536 19990224 (9)
DT Utility
EXNAM Primary Examiner: Prouty, Rebecca E.; Assistant Examiner: Monshipouri, M.
LREP Zelson, Esq., Steve; Lambris, Esq., Elias; Stames, Robert L.
CLMN Number of Claims: 16
ECL Exemplary Claim: 1
DRWN 3 Drawing Figure(s); 5 Drawing Page(s)
LN.CNT 1957
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 2 OF 14 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD
AB WO 9936469 A UPAB: 19991026
NOVELTY - A polysaccharide conjugate comprising a polysaccharide with an attached entity having a molecular weight of greater than or equals 5000, capable of binding to cellulose, is new. It can be used to target binding of an entity to cellulose.
USE - Products containing the conjugates include laundry products such as fabric detergent or fabric conditioner (the attached entity may be
enzyme or particle bearing fragrance) (claimed); also personal products (e.g. for targeting fragrance to bind to clothes); diagnostic test systems; and paper products.
ADVANTAGE - The cellulose-binding polysaccharides are robust and provide extra stability and product compatibility compared with other targeting molecules.
Dwg.0/0
AN 1999-527200 [44] WPIDS
DNC C1999-154802
TI Polysaccharide conjugates capable of binding to cellulose and products containing them.
DC A11 A96 A97 B04 D16 D25 F06 F09
IN BERRY, M J; DAVIS, P J; GIDLEY, M J
PA (BERR-I) BERRY M J; (UNIL) UNILEVER PLC; (UNIL) UNILEVER NV
CYC 84
PI WO 9936469 A1 19990722 (199944)* EN 34p
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW
AU 9925150 A 19990802 (199954)
ZA 9900191 A 20000927 (200050) 31p
BR 9813358 A 20001003 (200053)
EP 1047725 A1 20001102 (200056) EN
R: DE ES FR GB IT
ADT WO 9936469 A1 WO 1998-EP8551 19981223; AU 9925150 A AU 1999-25150 19981223; ZA 9900191 A ZA 1999-191 19990112; BR 9813358 A BR 1998-13358 19981223, WO 1998-EP8551 19981223; EP 1047725 A1 EP 1998-966867 19981223, WO 1998-EP8551 19981223
FDT AU 9925150 A Based on WO 9936469; BR 9813358 A Based on WO 9936469; EP 1047725 A1 Based on WO 9936469
PRAI EP 1998-300292 19980116

L6 ANSWER 3 OF 14 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD
AB WO 9903351 A UPAB: 19990316
A **dough** and bread improving composition comprises (a) an enzyme having **galactose oxidase** activity, and (b) an oxidisable substrate for (a) and/or an enzyme which can convert a compound into this substrate. Also claimed is a method of preparing a flour **dough**.
USE - The composition is useful for improving the rheological characteristics of flour **dough** with a **dough** strengthening effect, without stickiness and/or slackness
ADVANTAGE - Any type of flour **dough** can be used, e.g. wheat flour based bread products, noodle products, alimentary paste product, etc.
Dwg.0/4
AN 1999-131751 [11] WPIDS
DNC C1999-038439
TI A **dough** and bread improving composition comprising a **galactose oxidase** and a substrate for it - useful for improving the rheological characteristics of flour **dough** with a **dough** strengthening effect, without stickiness and/or slackness.
DC D11 D16
IN ROUAU, X; SCHRODER, M; SOE, J B
PA (DANI-N) DANISCO AS
CYC 83
PI WO 9903351 A1 19990128 (199911)* EN 41p
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW
AU 9883347 A 19990210 (199925)
EP 999752 A1 20000517 (200028) EN
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
ADT WO 9903351 A1 WO 1998-DK335 19980716; AU 9883347 A AU 1998-83347 19980716;
EP 999752 A1 EP 1998-933577 19980716, WO 1998-DK335 19980716
FDT AU 9883347 A Based on WO 9903351; EP 999752 A1 Based on WO 9903351
PRAI US 1997-53451 19970722; DK 1997-878 19970718

L6 ANSWER 4 OF 14 AGRICOLA
AN 2000:124 AGRICOLA
DN CAT10979462
TI Carbohydrate biotechnology protocols.
AU Bucke, C.
AV DNAL (TP248.65.P64C37 1999)
LCN 98048663
SO c1999 xii, 337 p. : ill. ; 24 cm
Publisher: Totowa, N.J. : Humana Press, c1999.
Series: Methods in biotechnology ; 10
ISBN: 0896035638 (alk. paper).
NTE Includes bibliographical references and index.
Introduction to carbohydrate biotechnology -- Production and isolation of xanthan gum -- Alginate from Zsotobacter vinelandii -- Production of schizophyllan -- Enzymatic synthesis of cellulose -- Modification of alginate using mannurnan C-5 epimerases -- Viscosity control of guar polysaccharide solutions by treatement with **galactose oxidase** and catalase enzymes -- The production of cyclodextrins using CGTase from bacillus macerans -- Production of microbial glycolipids -- Partial enzymatic hydrolysis of starch to maltodextrins on the laboratory scale -- The production of alpha(1-2)-terminated glucooligosaccharides -- Enzymatic production of fructooligosaccharides from sucrose -- Enzymatic production of inulooligosaccharides from inulin -- One-pot enzymatic synthesis of sialyl T-epitope -- Hydrolysis of

hemicelluloses u[illegible]g combnations of **xylanases** and [illegible]ruloyl esterases -- Enzymatic depolymerization of chitins and chitosans -- Synthesis of homo- and hetero-oligosaccharides from underivatized sugars using glycosidases -- Use of fluorophore-assisted carbohydrate electrophoresis (FACE) in the elucidatin of n-linked oligosaccharide structures -- Application of sucrose synthase in the synthesis of nucleotide sugars and saccharides -- Production of isomatulose using immobilized bacterial cells -- The production of mannitol by fermentation -- The production of 3-keto-derivateives of disaccharides -- Enzymatic synthesis of alpha-transglucosidase from Aspergillus niger -- Enzymatic glycosylation of aglycones of pharmacological significance -- Enzymatic synthesis of glycosides in aqueous-organic two-phase systems and supersaturated substrate solutions -- Use of beta-glucosidase in the development of flavor in wines and juices.
CY New Jersey; United States
DT Bibliography; (MONOGRAPH)
FS U.S. Imprints not USDA, Experiment or Extension
LA English

L6 ANSWER 5 OF 14 FROSTI COPYRIGHT 2000 LFRA
AB Arabinogalactan-peptide (AGP) is a group of water-soluble macromolecules with a highly branched structure. The amino acid composition of the peptidic fraction could provide functional properties through serving as a link to the carbohydrate fraction. The possible use of wheat flour AGP or its degradation products as a substrate for an oxidative enzyme was evaluated with **galactose oxidase**. This enzyme could be an alternative oxidative enzyme for use in bread-making. The composition and depolymerization of wheat flour AGP were determined. The effects of selected enzymic activities on oxidation were also evaluated. A crude liquid enzyme preparation from Aspergillus niger displayed activities capable of depolymerizing wheat flour AGP to galactobiose, **galactose** and arabinose. It could also produce substrate from the wheat flour AGP, associated with alpha-L-arabinofuranosidase.
AN 496464 FROSTI
TI Production of substrate for **galactose oxidase** by depolymerization of an arabinogalactan-peptide from wheat flour.
AU Schroder M.; Soe J.B.; Zargahi M.R.; Rouau X.
SO Journal of Agricultural and Food Chemistry, 1999, (April), 47 (4), 1483-1488 (19 ref.)
ISSN: 0021-8561
DT Journal
LA English
SL English

L6 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 1
AB **Hexose oxidase** (EC 1.1.3.5) (HOX) was purified 51-fold from the red algae Chondrus crispus, by several chromatog. methods, including hydrophobic interaction, chelating Sepharose, anion exchange, gel filtration, and chromatofocusing. Purified HOX was subjected to native PAGE and activity staining with nitroblue tetrazolium. For HOX electroeluted out of the gel and digested with endoproteinase Lys-C, the internal peptide sequence detd. was: D-P-G-Y-I-V-I-D-V-N-A-G-T-(V or P)-D-K-P-D-P-X. The mol. mass, detd. by gel filtration, was 126 kDa, vs. 65 kDa detd. by SDS-PAGE. The pI was detd. to 4.64 and 4.79 as a double band on an isoelectrofocusing gel. Km was detd. to 2.7 mM for D-glucose, 3.6 mM for D-**galactose**, 20.2 mM for cellobiose, 43.7 mM for maltose, 90.3 mM for **lactose**, 102 mM for xylose, and 531 mM for arabinose. The oxidn. of thiol groups in gluten was detd. by using Ellman's reagent: 5,5'-dithiobis (2-nitrobenzoic acid). The effect of HOX was compared to that of glucose oxidase. Both enzymes caused a dose-responsive redn. in the free thiol groups. Extensi-graph measurements and baking tests confirmed that HOX caused increased **dough** strength and increased bread vol. more efficiently than glucose oxidase using in the same dosage.
AN 1998:80318 CAPLUS

DN 128:166614
TI Purification and characterization of a hexose oxidase with excellent strengthening effects in bread
AU Poulsen, Charlotte; Hostrup, Pernille Bak
CS Danisco Ingredients, Enzyme Development, Brabrand, 8220, Den.
SO Cereal Chem. (1998), 75(1), 51-57
CODEN: CECHAF; ISSN: 0009-0352
PB American Association of Cereal Chemists
DT Journal
LA English

L6 ANSWER 7 OF 14 BIOBUSINESS COPYRIGHT 2000 BIOSIS
AB **Hexose oxidase** (EC 1.1.3.5) (HOX) was purified 51-fold from the red algae Chondrus crispus, by several chromatography methods, including hydrophobic interaction, chelating Sepharose, anion exchange, gel filtration, and chromatofocusing. Purified HOX was subjected to native PAGE and activity staining with nitroblue tetrazolium. For HOX electroeluted out of the gel and digested with endoproteinase Lys-C, the internal peptide sequence determined was: D-P-G-Y-I-V-I-D-V-N-A-G-T-(V or P)-D-K-P-D-P-X. The molecular mass, determined by gel filtration, was 126 kDa, versus 65 kDa determined by SDS-PAGE. The pI was determined to 4.64 and 4.79 as a double band on an isoelectrofocusing gel. K-m was determined to 2.7 mM for D-glucose, 3.6 mM for D-**galactose**, 20.2 mM for cellobiose, 43.7 mM for maltose, 90.3 mM for **lactose**, 102 mM for xylose, and 531 mM for arabinose. The oxidation of thiol groups in gluten was determined by using Ellman's reagent: 5,5'-dithiobis (2-nitrobenzoic acid). The effect of HOX was compared to that of glucose oxidase. Both enzymes caused a dose-responsive reduction in the free thiol groups. Extensigraph measurements and baking tests confirmed that HOX caused increased **dough** strength and increased bread volume more efficiently than glucose oxidase used in the same dosage.
AN 1998:19785 BIOBUSINESS
DN 0971608
TI Purification and characterization of a hexose oxidase with excellent strengthening effects in bread.
AU Poulsen C; Hostrup P B
CS Danisco Ingredients, Enzyme Development, Edwin Rahrs Vej 38, 8220 Brabrand, Denmark.
SO Cereal Chemistry, (1998) Vol.75, No.1, p.51-57.
ISSN: 0009-0352.
DT ARTICLE
FS NONUNIQUE
LA English

L6 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2000 ACS
AB Rheol. measurements of **dough** and glutenin macro polymer systems were used to study effects of enzymes. Glucose oxidase improved the complex modulus (G*). **Galactose oxidase** under favorable conditions resulted in better **dough** rigidity and increased the elastic behavior of the **dough**. Lignin peroxidase gave the opposite effect. Lipoxygenase increased G*, presumably due to oxidn. of protein polymers.
AN 1998:454862 CAPLUS
DN 129:215945
TI Application of oxidoreductases in baking: impact on gluten structure and dough rheology
AU Van Der Lugt, J. P.; Somers, W. A. C.; Lichtendonk, W.; Orsel, R.
CS TNO Nutrition and Food Research Institute, Zeist, 3700 AJ, Neth.
SO Eur. Symp. Enzymes Grain Process., Proc., 1st (1997), Meeting Date 1996, 164-176. Editor(s): Angelino, S. A. G. F. Publisher: TNO Nutrition and Food Research Institute, Zeist, Neth.
CODEN: 66KVAR
DT Conference
LA English

L6 ANSWER 9 OF 14 USPATFULL
AB Enzymatically active protein-enzyme complex membranes are prepared by treating a swollen protein membrane with an aqueous solution of a compatible active enzyme. These membranes are used to effect enzymatic reactions such as hydrolyzing starch, sucrose, urea or cellulose, lysis of cells or isomerizing D-glucose.
AN 86:41099 USPATFULL
TI Enzymatically active protein-enzyme complex membranes
IN Vieth, Wolf R., Belle Mead, NJ, United States
Wang, Shaw S., N. Brunswick, NJ, United States
Gilbert, Seymour G., Piscataway, NJ, United States
PA Research Corporation, New York, NY, United States (U.S. corporation)
PI US 4601981 19860722
AI US 1980-121478 19800214 (6)
DCD 19911022
RLI Continuation of Ser. No. US 1976-656384, filed on 9 Feb 1976, now abandoned which is a continuation of Ser. No. US 1974-439110, filed on 4
Feb 1974, now patented, Pat. No. US 3977941 which is a division of Ser. No. US 1971-135753, filed on 20 Apr 1971, now patented, Pat. No. US 3843446
DT Utility
EXNAM Primary Examiner: Naff, David M.
LREP Scully, Scott, Murphy & Presser
CLMN Number of Claims: 6
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 675
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 10 OF 14 USPATFULL
AB The amount of enzyme complexed to a protein membrane is increased by treating the protein before or after forming the membrane with a proteolytic enzyme. Preferred proteolytic enzymes are pepsin, trypsin and pronase. Treatment is carried out at a temperature between 15.degree. and 25.degree. C for a period of 1 to 12 hours. Enzymes are complexed to the protein membrane, after treatment, by swelling and washing the membrane and contacting the membrane with an enzyme.
AN 78:27895 USPATFULL
TI Preparation of enzyme-membrane complexes
IN Lin, Po-Min, 714 Bevier Rd., Piscataway, NJ, United States 08854
Giacin, Jack R., 2 Stanworth La., Allentown, NJ, United States 08501
Gilbert, Seymour G., 74 N. Ross Hall Blvd., Piscataway, NJ, United States 08854
Leeder, Joseph G., 379 Huff Rd., North Brunswick, NJ, United States 08902
PI US 4092219 19780530
AI US 1975-604131 19750813 (5)
DT Utility
EXNAM Primary Examiner: Naff, David M.
LREP Lerner, David, Littenberg & Samuel
CLMN Number of Claims: 14
ECL Exemplary Claim: 1
DRWN 2 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 595
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 11 OF 14 USPATFULL
AB A composite membrane structure for immobilizing biologically active materials, such as enzymes, is formed by coating a microporous polymeric
membrane with a thin layer of an inert proteinaceous material, such as zein or collagen, so that the resultant coated membrane retains intercommunicating capillary pores that extend through its structure. Immobilization of a biologically active material is carried out by

contacting the [redacted]ted membrane with the biologi[redacted]y active material in solution and drying. Biologically active materia[redacted] immobilized on the membrane can be used to perform biochemical reactions and are useful in carrying out tests for glucose and uric acid.

AN 78:791 USPATFULL
TI Biologically active membrane material
IN Lai, Chung Jung, Watertown, MA, United States
Goldin, Stanley M., Norwood, MA, United States
PA Millipore Corporation, Bedford, MA, United States (U.S. corporation)
PI US 4066512 19780103
AI US 1976-684746 19760510 (5)
RLI Continuation of Ser. No. US 1974-503624, filed on 6 Sep 1974, now abandoned
DT Utility
EXNAM Primary Examiner: Naff, David M.
CLMN Number of Claims: 18
ECL Exemplary Claim: 1
DRWN 5 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 732

L6 ANSWER 12 OF 14 USPATFULL
AB Enzymatically active protein-enzyme complex membranes are prepared by treating a swollen protein membrane with an aqueous solution of a compatible active enzyme. These membranes are used to effect enzymatic reactions.

AN 76:47910 USPATFULL
TI Protein-enzyme complex membranes
IN Vieth, Wolf R., Belle Mead, NJ, United States
Wang, Shaw S., North Brunswick, NJ, United States
Gilbert, Seymour G., Piscataway, NJ, United States
PA Research Corporation, New York, NY, United States (U.S. corporation)
PI US 3977941 19760831
AI US 1974-439110 19740204 (5)
DCD 19911022
RLI Division of Ser. No. US 1971-135753, filed on 20 Apr 1971, now patented,
Pat. No. US 3843446
DT Utility
EXNAM Primary Examiner: Naff, David M.
LREP Oblon, Fisher, Spivak, McClelland & Maier
CLMN Number of Claims: 10
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 614
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 13 OF 14 FROSTI COPYRIGHT 2000 LFRA
AB A composition for **dough** and bread improvement is disclosed. It incorporates an enzyme with **galactose oxidase** activity and an oxidizable substrate for this enzyme. It is said to improve the rheological properties of flour **doughs** and the quality characteristics of bread products. Desirable quality characteristics include soft crumb structure, high specific volume, and freedom from staling within the expected shelf-life of fresh bread. **Galactose oxidase** acts as an oxidoreductase, and its use overcomes problems associated with use of cellulases or hemicellulases in flour **doughs**. Because the natural **galactose** content of **cereal flours** is very low, it is beneficial to include an oxidizable substrate in the formulation.

AN 489211 FROSTI
TI A composition comprising an enzyme having **galactose oxidase** activity and use thereof.
IN Rouau X.; Schroder M.; Soe J.B.
PA Danisco A/S
SO PCT Patent Application

PI WO 9903351 A1
AI 19980716
PRAI Denmark 19970718
United States 19970722
DT Patent
LA English
SL English

L6 ANSWER 14 OF 14 FROSTI COPYRIGHT 2000 LFRA
AB A composition for **dough** and bread improvement is disclosed. It incorporates an enzyme with **galactose oxidase** activity and an oxidizable substrate for this enzyme. It is said to improve the rheological properties of flour **doughs** and the quality characteristics of bread products. Desirable quality characteristics include soft crumb structure, high specific volume, and freedom from staling within the expected shelf-life of fresh bread. **Galactose oxidase** acts as an oxidoreductase, and its use overcomes problems associated with use of cellulases or hemicellulases in flour **doughs**. Because the natural **galactose** content of **cereal flours** is very low, it is beneficial to include an oxidizable substrate in the formulation.
AN 526332 FROSTI
TI A composition comprising an enzyme having **galactose oxidase** activity and use thereof.
IN Rouau X.; Schroder M.; Soe J.B.
PA Danisco A/S
SO European Patent Application
PI EP 999752 A1
WO 9903351 19990128
AI 19980716
PRAI Denmark 19970718
United States 19970722
DT Patent
LA English
SL English

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=> index bioscience, chemistry

FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED
FILE 'PAPERCHEM' ACCESS NOT AUTHORIZED
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                        63.16      68.86

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)              SINCE FILE      TOTAL
                                                           ENTRY    SESSION
CA SUBSCRIBER PRICE                                        -1.11      -1.11

INDEX 'ADISALERTS, ADISINSIGHT, AGRICOLA, AIDSLINE, ANABSTR, AQUASCI,
      BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO,
CABA,
      CANCERLIT, CAPLUS, CEABA, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU,
      DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 16:27:53 ON 16
NOV 2000

80 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view
search error messages that display as 0* with SET DETAIL OFF.

=> s (l1 (p) l2) and l3

          2   FILE AGRICOLA
          2   FILE BIOBUSINESS
          0*  FILE BIOCOMMERCE
          2   FILE BIOSIS
          0*  FILE BIOTECHABS
          0*  FILE BIOTECHDS
          0*  FILE BIOTECHNO
  12 FILES SEARCHED...
          2   FILE CAPLUS
          0*  FILE CEABA
          0*  FILE CIN
  27 FILES SEARCHED...
          1*  FILE ESBIOBASE
          0*  FILE FOMAD
          0*  FILE FOREGE
          3*  FILE FROSTI
          1*  FILE FSTA
          0*  FILE KOSMET
  41 FILES SEARCHED...
          0*  FILE MEDICONF
          0*  FILE NTIS
          2   FILE SCISEARCH
         21   FILE USPATFULL
  55 FILES SEARCHED...
          2   FILE WPIDS
          0*  FILE WPINDEX
  57 FILES SEARCHED...
          0*  FILE ALUMINIUM
          0*  FILE APILIT
          0*  FILE APILIT2
          0*  FILE BABS
          0*  FILE CAOLD
          0*  FILE CBNB
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          0*  FILE COMPENDEX
          0*  FILE DKILIT
          0*  FILE INSPEC
          0*  FILE INSPHYS
          0*  FILE METADEX
          1   FILE PAPERCHEM2
          0*  FILE RAPRA
          0*  FILE RUSSCI
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          0*  FILE VTB
          0*  FILE WSCA

  11 FILES HAVE ONE OR MORE ANSWERS,    80 FILES SEARCHED IN STNINDEX

L7   QUE (L1 (P) L2) AND L3

=> d rank

F1           21   USPATFULL
F2            3*  FROSTI
F3            2   AGRICOLA
F4            2   BIOBUSINESS
F5            2   BIOSIS
F6            2   CAPLUS
F7            2   SCISEARCH
F8            2   WPIDS
F9            1   PAPERCHEM2
F10           1*  ESBIOBASE
F11           1*  FSTA


=> s l7 not l4

          1   FILE AGRICOLA
          1   FILE BIOBUSINESS
          0*  FILE BIOCOMMERCE
          1   FILE BIOSIS
          0*  FILE BIOTECHABS
          0*  FILE BIOTECHDS
  11 FILES SEARCHED...
          0*  FILE BIOTECHNO
          0*  FILE CEABA
          0*  FILE CIN
  24 FILES SEARCHED...
          0*  FILE ESBIOBASE
          0*  FILE FOMAD
          0*  FILE FOREGE
          0*  FILE FROSTI
          0*  FILE FSTA
  37 FILES SEARCHED...
          0*  FILE KOSMET
          0*  FILE MEDICONF
          0*  FILE NTIS
  51 FILES SEARCHED...
          1   FILE SCISEARCH
         16   FILE USPATFULL
          0*  FILE WPINDEX
  57 FILES SEARCHED...
          0*  FILE ALUMINIUM
          0*  FILE APILIT
          0*  FILE APILIT2
          0*  FILE BABS
          0*  FILE CAOLD
          0*  FILE CBNB
          0*  FILE COMPENDEX
          0*  FILE DKILIT
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          0*  FILE IN[redacted]EC
          0*  FILE IN[redacted]HYS
          0*  FILE METADEX
          1   FILE PAPERCHEM2
  73 FILES SEARCHED...
          0*  FILE RAPRA
          0*  FILE RUSSCI
          0*  FILE VTB
          0*  FILE WSCA

   6 FILES HAVE ONE OR MORE ANSWERS,   80 FILES SEARCHED IN STNINDEX

L8   QUE L7 NOT L4

=> d rank

F1          16   USPATFULL
F2           1   AGRICOLA
F3           1   BIOBUSINESS
F4           1   BIOSIS
F5           1   SCISEARCH
F6           1   PAPERCHEM2


=> file f1-f6

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                    12.15      81.01

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                     0.00      -1.11

FILE 'USPATFULL' ENTERED AT 16:43:54 ON 16 NOV 2000
CA INDEXING COPYRIGHT (C) 2000 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'AGRICOLA' ENTERED AT 16:43:54 ON 16 NOV 2000

FILE 'BIOBUSINESS' ENTERED AT 16:43:54 ON 16 NOV 2000
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FILE 'PAPERCHEM2' ENTERED AT 16:43:54 ON 16 NOV 2000
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=> s l8

L9          21 L8

=> dup rem l9

PROCESSING COMPLETED FOR L9
L10          20 DUP REM L9 (1 DUPLICATE REMOVED)

=> d 1-20 ab,bib


L10  ANSWER 1 OF 20  USPATFULL
AB      The present invention relates to detergent compositions comprising a
        cellulase termination composition and cellulase in order to prevent
```

potential ten[redacted]e strength loss related to the [redacted]drolytic activity of cellulase on cellulose substrates while maintaining the desired benefits
from the use of cellulase.
AN 2000:77334 USPATFULL
TI Cellulase activity control by a terminator
IN Baeck, Andre Cesar, Bonheiden, Belgium
Busch, Alfred, Londerzeel, Belgium
Convents, Andre Christian, Cincinnati, OH, United States
Paquatte, Olivier, Strombeek-Bever, Belgium
PA The Procter & Gamble Company, Cincinnati, OH, United States (U.S. corporation)
PI US 6077818 20000620
WO 9730143 19970821
AI US 1998-125580 19981013 (9)
WO 1997-US2515 19970218
19981013 PCT 371 date
19981013 PCT 102(e) date
PRAI EP 1996-870013 19960220
DT Utility
EXNAM Primary Examiner: Fries, Kery
LREP Cook, C. Brant; Zerby, K. W.; Rasser, J. C.
CLMN Number of Claims: 15
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1852
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 2 OF 20 USPATFULL
AB Humanized anti-CD11a antibodies and various uses therefor are disclosed.
The humanized anti-CD11a antibody may bind specifically to human CD11a I-domain, have an IC50(nM) value of no more than about 1 nM for preventing adhesion of Jurkat cells to normal human epidermal keratinocytes expressing ICAM-1, and/or an IC50 (nM) value of no more than about 1 nM in the mixed lymphocyte response assay.
AN 2000:31527 USPATFULL
TI Humanized anti-CD11a antibodies
IN Jardieu, Paula M., San Francisco, CA, United States
Presta, Leonard G., San Francisco, CA, United States
PA Genentech, Inc., South San Francisco, CA, United States (U.S. corporation)
PI US 6037454 20000314
AI US 1997-974899 19971120 (8)
PRAI US 1996-31971 19961127 (60)
DT Utility
EXNAM Primary Examiner: Saunders, David; Assistant Examiner: VanderVegt, F. Pierre
LREP Lee, Wendy M.; Schwartz, Timothy R.
CLMN Number of Claims: 30
ECL Exemplary Claim: 1
DRWN 8 Drawing Figure(s); 4 Drawing Page(s)
LN.CNT 3180
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 3 OF 20 USPATFULL
AB A first media provides an oxygen inducer such as catalase, bound and stabilized in pellet form so as to dissipate slowly into aqueous surroundings. A second media provides an oxygen supplier such as a peroxide, stabilized by combination with a proteinaceous compound such as urea and bound in a matrix that limits oxygen release. The two media are combined in aqueous environment to generate nascent oxygen at a modulated rate such that the oxygen is efficiently absorbed into the surrounding aqueous environment, promoting growth of aerobic species and
reducing biological pollution. Specific adaptations demonstrate benefits

of use in shr[redacted] or fish ponds, raw milk, frui[redacted]uice, fresh food, silage and animal feed, fertilizer, plumbing systems, and grease traps. When used in ponds, further adaptations reduce algae and phytoplankton populations.

AN 1999:27452 USPATFULL
TI Biochemical media system for reducing pollution
IN Reddy, Malireddy S., 78 Cherry Hills Farm Dr., Englewood, CO, United States 80110
Reddy, Syama M., 78 Cherry Hills Farm Dr., Englewood, CO, United States 80110
PI US 5876990 19990302
AI US 1996-731886 19961022 (8)
DT Utility
EXNAM Primary Examiner: Wyse, Thomas G.
LREP Rost, Kyle W.
CLMN Number of Claims: 44
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1806
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 4 OF 20 SCISEARCH COPYRIGHT 2000 ISI (R)
AB Water extractable arabinogalactan-peptide (WE-AGP) isolated from white wheat flour was depolymerized enzymatically to liberate substrate for a **galactose oxidase** from Dactylium dendroides. A crude liquid pectolytic preparation from Aspergillus niger (p70) displayed activities capable of converting WE-AGP into a substrate for **galactose oxidase**. The most favorable substrate was observed when WE-AGP was not fully depolymerized into **galactose** and arabinose, alpha-L-Arabinofuranosidase B from A. niger was also able to produce substrate from WE-AGP; arabinofuranosidase-treated WE-AGP was a better substrate for **galactose oxidase** than **galactose**. Treatment by the crude p70 and purified enzymes showed that alpha-L-arabinofuranosidase was partly responsible for the production of substrate, whereas beta-galactosidase did not result in any substrate production or improve the effect of alpha-L-arabinofuranosidase. However, the positive effect of alpha-L-arabinofuranosidase was increased when p70 was added at the same level of arabinofuranosidase activity, suggesting that additional enzyme activities present in p70 were responsible for production of substrate for **galactose oxidase**.
AN 1999:336047 SCISEARCH
GA The Genuine Article (R) Number: 189HL
TI Production of substrate for **galactose oxidase** by depolymerization of an arabinogalactan-peptide from wheat flour
AU Schroder M; Soe J B; Zargahi M R; Rouau X (Reprint)
CS ECOLE NATL SUPER AGRON MONTPELLIER, INRA, UNITE TECHNOL CEREALES & AGROPOLYMERES, 2 PL VIALA, F-34060 MONTPELLIER 02, FRANCE (Reprint); ECOLE NATL SUPER AGRON MONTPELLIER, INRA, UNITE TECHNOL CEREALES & AGROPOLYMERES, F-34060 MONTPELLIER 02, FRANCE; DANISCO INGREDIENTS, BRABRAND 8220, DENMARK
CYA FRANCE; DENMARK
SO JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY, (APR 1999) Vol. 47, No. 4, pp. 1483-1488.
Publisher: AMER CHEMICAL SOC, 1155 16TH ST, NW, WASHINGTON, DC 20036.
ISSN: 0021-8561.
DT Article; Journal
FS LIFE; AGRI
LA English
REC Reference Count: 19
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L10 ANSWER 5 OF 20 USPATFULL

AB Uses for Wnt [redacted]ypeptides in hematopoiesis are [redacted]sclosed. In particular,
in vitro and in vivo methods for enhancing proliferation or differentiation of a hematopoietic stem/progenitor cell using a Wnt polypeptide, and optionally another cytokine, are described.
AN 1998:159916 USPATFULL
TI Method of enhancing proliferation or differentiation of hematopoietic stem cells using Wnt polypeptides
IN Matthews, William, Woodside, CA, United States
Austin, Timothy W., Morgan Hill, CA, United States
PA Genentech, Inc., South San Francisco, CA, United States (U.S. corporation)
PI US 5851984 19981222
AI US 1996-696566 19960816 (8)
DT Utility
EXNAM Primary Examiner: Fitzgerald, David L.; Assistant Examiner: Basham, Daryl A.
LREP Svoboda, Craig G.; Marschang, Diane L.
CLMN Number of Claims: 20
ECL Exemplary Claim: 1
DRWN 4 Drawing Figure(s); 2 Drawing Page(s)
LN.CNT 3923
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 6 OF 20 AGRICOLA
AB **Hexose oxidase** (EC 1.1.3.5) (HOX) was purified 51-fold from the red algae Chondr us crispus, by several chromatography methods, including hydrophobic interaction , chelating Sepharose, anion exchange, gel filtration, and chromatofocusing. Pur ified HOX was subjected to native PAGE and activity staining with nitroblue tetr azolium. For HOX electroeluted out of the gel and digested with endoproteinase L ys-C, the internal peptide sequence determined was: D-P-G-Y-I-V-I-D-V-N-A-G-T-(V or P)-D-K-P-D-P-X. The molecular mass, determined by gel filtration, was 126 kD a, versus 65 kDa determined by SDS-PAGE. The pI was determined to 4.64 and 4.79 as a double band on an isoelectrofocusing gel. K(m) was determined to 2.7 mM for D-glucose, 3.6 mM for D-**galactose**, 20.2 mM for cellobiose, 43.7 mM for maltose, 90.3 mM for **lactose** , 102 mM for xylose, and 531 mM for arabinose. The oxidation of thiol groups in gluten was determined by using Ellman's reagent: 5,5'-dithio bis (2-nitrobenzoic acid). The effect of HOX was compared to that of glucose oxi dase. Both enzymes caused a dose-responsive reduction in the free thiol groups. Extensigraph measurements and baking tests confirmed that HOX caused increased d ough strength and increased bread volume more efficiently than glucose oxidase u sed in the same dosage.
AN 1998:76544 AGRICOLA
DN IND21643189
TI Purification and characterization of a hexose oxidase with excellent strengthening effects in bread.
AU Poulson, C.; Hostrup, P.B.
CS Danisco Ingredients, Brabrand, Denmark.
AV DNAL (59.8 C33)
SO Cereal chemistry, Jan/Feb 1998. Vol. 75, No. 1. p. 51-57
Publisher: St. Paul, Minn. : American Association of Cereal Chemists, 1924-
CODEN: CECHAF; ISSN: 0009-0352
NTE Includes references
CY Minnesota; United States
DT Article
FS U.S. Imprints not USDA, Experiment or Extension
LA English

L10 ANSWER 7 OF 20 USPATFULL
AB Polyspecific immunoconjugates and antibody composites that bind a multidrug transporter protein and an antigen associated with a tumor or

infectious ag[redacted] are used to overcome the mult[redacted]ug resistant phenotype.

These immunoconjugates and composites also can be used diagnostically to

determine whether the failure of traditional chemotherapy is due to the presence of multidrug resistant tumor cells, multidrug resistant HIV-infected cells or multidrug resistant infectious agents.

AN 97:117676 USPATFULL
TI Polyspecific immunoconjugates and antibody composites for targeting the multidrug resistant phenotype
IN Goldenberg, David M., Mendham, NJ, United States
PA Immunomedics, Inc., Morris Plains, NJ, United States (U.S. corporation)
PI US 5698178 19971216
AI US 1996-629387 19960408 (8)
RLI Division of Ser. No. US 1994-286430, filed on 5 Aug 1994
DT Utility
EXNAM Primary Examiner: Chan, Christina Y.; Assistant Examiner: Cech, Emma
LREP Foley & Lardner
CLMN Number of Claims: 24
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 2203
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 8 OF 20 USPATFULL
AB Polyspecific immunoconjugates and antibody composites that bind a multidrug transporter protein and an antigen associated with a tumor or infectious agent are used to overcome the multidrug resistant phenotype.

These immunoconjugates and composites also can be used diagnostically to

determine whether the failure of traditional chemotherapy is due to the presence of multidrug resistant tumor cells, multidrug resistant HIV-infected cells or multidrug resistant infectious agents.

AN 97:104602 USPATFULL
TI Polyspecific immunoconjugates and antibody composites for targeting the multidrug resistant phenotype
IN Goldenberg, David M., Mendham, NJ, United States
PA Immunomedics, Inc., Morris Plains, NJ, United States (U.S. corporation)
PI US 5686578 19971111
AI US 1994-286430 19940805 (8)
DT Utility
EXNAM Primary Examiner: Eisenschenk, Frank C.
LREP Foley & Lardner
CLMN Number of Claims: 14
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 2133
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 9 OF 20 USPATFULL
AB An anticaking agent which reduces the stickiness of the chunked, diced, or shredded cheese and improves the functionality of cheese is formulated of fine mesh vegetable flour, bentonite, cellulose, and antimycotic agents or bacterial cultures. This anticaking agent also will reduce the yeast and mold growth. This discovery is also extended to include various flavors, colors, enzymes and other supplements into the anticaking agent, to ultimately add to the cheese.

AN 97:38239 USPATFULL
TI Method of treating a divided cheese product for anticaking
IN Reddy, Malireddy S., 78 Cherry Hills Farm Dr., Englewood,, CO, United States 80110
PI US 5626893 19970506
AI US 1994-324897 19941018 (8)
DT Utility
EXNAM Primary Examiner: Wong, Leslie

LREP Rost, Kyle W.
CLMN Number of Claims: 33
ECL Exemplary Claim: 20
DRWN No Drawings
LN.CNT 1408
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 10 OF 20 USPATFULL
AB The invention relates to recombinant DNA technology for the production of an enzyme having sulfhydryl oxidase ("SOX") activity. This SOX-enzyme can be used where the oxidation of free sulfhydryl groups (thio compounds) to the corresponding disulfides is desirable. SOX enzyme may be used for treatment of bakery products or for removal of off-flavour from milk or beer.
AN 96:55683 USPATFULL
TI Cloning and expression of DNA encoding a ripening form of a polypeptide having sulfhydryl oxidase activity
IN Maat, Jan, Monster, Netherlands
Musters, Wouter, Maassluis, Netherlands
Stam, Hein, Diemen, Netherlands
Schaap, Peter J., Hoorn, Netherlands
van de Vonderwoort, Peter J., Wageningen, Netherlands
Visser, Jacob, Wageningen, Netherlands
Verbakel, Johannes M., Maasland, Netherlands
PA Unilever Patent Holdings BV, Netherlands (non-U.S. corporation)
PI US 5529926 19960625
AI US 1995-423441 19950419 (8)
RLI Continuation of Ser. No. US 1993-44620, filed on 9 Apr 1993, now abandoned
PRAI EP 1992-201027 19920410
DT Utility
EXNAM Primary Examiner: Wax, Robert A.; Assistant Examiner: Kim, Hyosuk
LREP Cushman Darby & Cushman
CLMN Number of Claims: 6
ECL Exemplary Claim: 1
DRWN 23 Drawing Figure(s); 18 Drawing Page(s)
LN.CNT 1849
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 11 OF 20 BIOBUSINESS COPYRIGHT 2000 BIOSISDUPLICATE 1
AN 96:71597 BIOBUSINESS
DN 0836458
TI Application of oxidoreductases in baking: Impact of some oxidoreductases on gluten structure and **dough** rheology.
AU Somers W A C; Orsel R; Van Der Lugt J P
CS TNO Nutrition Food Res. Inst., P.O. Box 360, 3700 AJ Zeist, Netherlands
SO Cereal Foods World, (1996) Vol.41, No.7, P.550.
81st Annual Meeting of the American Association of Cereal Chemistry, Baltimore, Maryland, USA, September 15-19, 1996. CEREAL FOODS WORLD.
ISSN:
0146-6283.
DT CONFERENCE
FS NONUNIQUE
LA ENGLISH

L10 ANSWER 12 OF 20 USPATFULL
AB A newly discovered lignin peroxidase enzyme is provided. The enzyme is obtained from a bacterial source and is capable of degrading the lignin portion of lignocellulose in the presence of hydrogen peroxide. The enzyme is extracellular, oxidative, inducible by lignin, larch wood **xylan**, or related substrates and capable of attacking certain lignin substructure chemical bonds that are not degradable by fungal lignin peroxidases.
AN 93:27027 USPATFULL
TI Bacterial extracellular lignin peroxidase

IN Crawford, Don[redacted] L., Moscow, ID, United States
Ramachandra, [redacted]alidhara, Moscow, ID, United States
PA Idaho Research Foundation, Incorporation, Moscow, ID, United States (U.S. corporation)
PI US 5200338 19930406
AI US 1988-277802 19881130 (7)
DT Utility
EXNAM Primary Examiner: Brown, Johnnie R.; Assistant Examiner: Webber, Pamela S.
LREP Cooley Godward Castro Huddleson & Tatum
CLMN Number of Claims: 16
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 816
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 13 OF 20 USPATFULL
AB The invention relates to amine-containing porphyrin derivatives. Theporphyrins can be used as photosensitizers which are useful as therapeutic agents. Also described are methods for preparing conjugates in which a porphyrin derivative is covalently attached to an antibody or antibody fragment. In vivo therapeutic methods utilizing the conjugates are also desired.
AN 92:86771 USPATFULL
TI Amine-containing porphyrin derivatives
IN Goers, John W. F., Atascadero, CA, United States
King, Hurley D., Yardley, PA, United States
Lee, Chyi, New Brunswick, NJ, United States
Coughlin, Daniel J., Plainsboro, NJ, United States
Alvarez, Vernon L., Morrisville, PA, United States
Rodwell, John D., Yardley, PA, United States
McKearn, Thomas J., New Hope, PA, United States
PA Cytogen Corporation, Princeton, NJ, United States (U.S. corporation)
PI US 5156840 19921020
AI US 1989-327881 19890320 (7)
RLI Division of Ser. No. US 1984-650375, filed on 13 Sep 1984, now patented, Pat. No. US 4867973, issued on 19 Sep 1989 which is a continuation-in-part of Ser. No. US 1982-442050, filed on 16 Nov 1982, now abandoned which is a continuation-in-part of Ser. No. US 1982-356315, filed on 9 Mar 1982, now patented, Pat. No. US 4671958, issued on 9 Jun 1987
DT Utility
EXNAM Primary Examiner: Friedman, Stanley J.
LREP Pennie & Edmonds
CLMN Number of Claims: 1
ECL Exemplary Claim: 1
DRWN 10 Drawing Figure(s); 8 Drawing Page(s)
LN.CNT 2194
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 14 OF 20 USPATFULL
AB Disclosed are novel 5-C-hydroxymethylhexose compounds and their derivatives which exhibit sugar-like functionality when used in food compositions. The derivatives include stereoisomers, di-, tri-, and polysaccharides, alkyl glycosides, polyol, and alditol derivatives. Also disclosed are sugar substitute compositions and food compositions containing these compounds and their derivatives.
AN 92:31988 USPATFULL
TI Functional sugar substitutes with reduced calories
IN Mazur, Adam W., Cincinnati, OH, United States
PA The Procter & Gamble Company, Cincinnati, OH, United States (U.S. corporation)
PI US 5106967 19920421

AI US 1991-70644[redacted]19910528 (7)
RLI Division of Ser. No. US 1991-653333, filed on [redacted] Feb 1991, now patented,
Pat. No. US 5041541, issued on 20 Aug 1991 which is a division of Ser. No. US 1989-339531, filed on 20 Apr 1989, now patented, Pat. No. US 5064672, issued on 12 Nov 1991 which is a continuation-in-part of Ser. No. US 1988-190486, filed on 5 May 1988, now abandoned
DT Utility
EXNAM Primary Examiner: Brown, Johnnie R.; Assistant Examiner: Carson, Nancy S.
LREP Dabek, Rose Ann; Yetter, Jerry J.; Witte, Richard C.
CLMN Number of Claims: 12
ECL Exemplary Claim: 1,6
DRWN No Drawings
LN.CNT 961
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 15 OF 20 USPATFULL
AB Disclosed are novel 5-C-hydroxymethylhexose compounds and their derivatives which exhibit sugar-like functionality when used in food compositions. The derivatives include stereoisomers, di-, tri-, and polysaccharides, alkyl glycosides, polyol, and alditol derivatives. Also
disclosed are sugar substitute compositions and food compositions containing these compounds and their derivatives.
AN 91:92371 USPATFULL
TI Functional sugar substitutes with reduced calories
IN Mazur, Adam W., Cincinnati, OH, United States
PA The Procter & Gamble Company, Cincinnati, OH, United States (U.S. corporation)
PI US 5064672 19911112
AI US 1991-653333 19910211 (7)
RLI Division of Ser. No. US 1989-339531, filed on 20 Apr 1989 which is a continuation-in-part of Ser. No. US 1988-190486, filed on 5 May 1988, now abandoned
DT Utility
EXNAM Primary Examiner: Golian, Joseph
LREP Dabek, R. A.; Yetter, J. J.; Witte, R. C.
CLMN Number of Claims: 11
ECL Exemplary Claim: 1,5
DRWN No Drawings
LN.CNT 1014
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 16 OF 20 USPATFULL
AB Disclosed are novel 5-C-hydroxymethylhexose compounds and their derivatives which exhibit sugar-like functionality when used in food compositions. The derivatives include stereoisomers, di-, tri-, and polysaccharides, alkyl glycosides, polyol, and alditol derivatives. Also
disclosed are sugar substitute compositions and food compositions containing these compounds and their derivatives.
AN 91:66894 USPATFULL
TI Functional sugar substituted with reduced calories
IN Mazur, Adam W., Cincinnati, OH, United States
PA The Procter & Gamble Company, Cincinnati, OH, United States (U.S. corporation)
PI US 5041541 19910820
AI US 1989-339531 19890420 (7)
RLI Continuation-in-part of Ser. No. US 1988-190486, filed on 5 May 1988, now abandoned
DT Utility
EXNAM Primary Examiner: Brown, Johnnie R.; Assistant Examiner: Carson, Nancy S.
LREP Dabek, Rose Ann; Yetter, Jerry J.; Witte, Richard C.
CLMN Number of Claims: 31

ECL Exemplary Cla[redacted] 1
DRWN No Drawings
LN.CNT 1032
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 17 OF 20 USPATFULL
AB A sulfhydryl oxidase, which is a flavor protein, and a method of isloating the same from a culture of the microorganism Aspergillus niger. The claimed sulfhydryl oxidase has a molecular weight of about 106,000 and a pH optimum of about 5.5 for oxidation of glutathione in an acetate buffer at 250.degree. C.
AN 90:4348 USPATFULL
TI Microbial sulfhydryl oxidase and method
IN Hammer, Frank E., Schaumburg, IL, United States
Scott, Don, Schaumburg, IL, United States
Wagner, Fred W., Lincoln, NE, United States
Ray, Lee, Elk Grove Village, IL, United States
de la Motte, Rebecca S., Lincoln, NE, United States
PA Suomen Sokeri Oy, Helsinki, Finland (non-U.S. corporation)
PI US 4894340 19900116
AI US 1987-136723 19871221 (7)
DT Utility
EXNAM Primary Examiner: Rosenberg, Peter D.
LREP Baker & McKenzie
CLMN Number of Claims: 14
ECL Exemplary Claim: 1
DRWN 10 Drawing Figure(s); 5 Drawing Page(s)
LN.CNT 1084
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 18 OF 20 USPATFULL
AB This invention relates to antibody-therapeutic agent conjugates having a therapeutic agent covalently attached to an antibody or antibody fragment. Also described are methods for intermediates in the preparation of antibody conjugates. Therapeutic in vivo methods utilizing such antibody-therapeutic agent conjugates are described.
AN 89:78541 USPATFULL
TI Antibody-therapeutic agent conjugates
IN Goers, John W. F., Atascadero, CA, United States
King, Hurley D., Yardley, PA, United States
Lee, Chyi, New Brunswick, NJ, United States
Coughlin, Daniel J., Plainsboro, NJ, United States
Alvarez, Vernon L., Morrisville, PA, United States
Rodwell, John D., Yardley, PA, United States
McKearn, Thomas J., New Hope, PA, United States
PA Cytogen Corporation, Princeton, NJ, United States (U.S. corporation)
PI US 4867973 19890919
AI US 1984-650375 19840913 (6)
DCD 20040609
RLI Continuation-in-part of Ser. No. US 1984-646328, filed on 31 Aug 1984 And Ser. No. US 1984-646327, filed on 31 Aug 1984 , each which is a continuation-in-part of Ser. No. US 1982-442050, filed on 16 Nov 1982, now abandoned which is a continuation-in-part of Ser. No. US 1982-356315, filed on 9 Mar 1982, now patented, Pat. No. US 4671958
DT Utility
EXNAM Primary Examiner: Teskin, Robin L.
LREP Pennie & Edmonds
CLMN Number of Claims: 79
ECL Exemplary Claim: 1
DRWN 10 Drawing Figure(s)
LN.CNT 2645
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 19 OF 20 USPATFULL

AB The disaccha[redacted] .beta.-D-Gal (1->>3)-D-GalNAc[redacted] hich specifically binds with peanut agglutinin (PNA) or oxidized by **galactose oxidase**, has been discovered in the colorectal mucus of patients with cancer or precancer. Because of the presence of .beta.-D-Gal-(1>>3)-D-GalNAc also on neuraminidase treated erythrocytes of the ABO type, their competitive binding with PNA has been exploited to develop a hemagglutination inhibition assay. Additional methods of simple detection of this disaccharide include a latex agglutination test, enzyme-avidin-biotinylated PNA, and a **galactose oxidase** strip test. This rapid, simple and inexpensive assay is designed to test the presence of .beta.-D-Gal-(1>>3)-D-GalNAc in large intestine mucus obtained by routine digital-rectal examination and has the potential for screening populations for large intestinal carcinomas.

AN 89:67403 USPATFULL

TI Screening test for large intestinal cancer

IN Shamsuddin, Abulkalam M., 2916 Old Court Rd., Baltimore, MD, United States 21208
Elsayed, Alaaeldeen M., 6458 Root Dr., Glen Burnie, MD, United States 21061
Jockle, Glenn A., 511 S. Sharp St., Baltimore, MD, United States 21201

PI US 4857457 19890815

AI US 1986-889022 19860724 (6)

DT Utility

EXNAM Primary Examiner: Kepplinger, Esther M.

LREP Haight & Associates

CLMN Number of Claims: 16

ECL Exemplary Claim: 1

DRWN 3 Drawing Figure(s); 2 Drawing Page(s)

LN.CNT 451

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 20 OF 20 PAPERCHEM2 COPYRIGHT 2000 IPST

AB Optimized conditions were devised for the oxidn. of polysaccharides contg. terminal D-galactopyranosyl residues to new polysaccharides contg. uronic acid, by a known 2-stage sequence employing D-**galactose oxidase** and halogen. The isolation of D-galacturonic acid (as galactaric acid) from the hydrolyzates of an oxidized galactomannan confirms the conversion of D-galactopyranosyl residues into D-galactopyranosyluronic acid residues in that polymer. An aldobiouronic acid thought to be 6-O-(alpha-D-galactopyranosyluronic acid)-D-mannose was detected in the partial acid hydrolyzate of this galacturonogalactomannan derived from guaran. Acidic fragments contg. D-galacturonic acid were isolated from the partial acid hydrolyzates of oxidized galactoglucomannan of spruce and oxidized arabinogalactan of larch; this indicates that the 2-stage sequence will oxidize D-galactopyranosyl residues attached by alpha-D or beta-D glycosidic bonds to polysaccharides of structural complexity greater than that of the galactomannan of guaran. The decrease in mol.wt. of the larch arabinogalactan, together with the nonquant. relationship between the disappearance of D-galactopyranosyl residues and the appearance of uronic acid, as a result of the oxidns., suggests that the reactions of this polymer do not follow a simple scheme. The devt. of a refined technique for the elucidation of the nature of the D-galactopyranosyl residues of polysaccharides will have to depend upon more certain knowledge of the action and specificity of the enzyme than is at present available. 23 ref.

AN 68:5474 PAPERCHEM2

SN 000015227

DN AB3905474

TI OXIDATION OF D-GALACTOPYRANOSYL RESIDUES OF POLYSACCHARIDES TO

D-GALACTOPYRANO[redacted]URONIC ACID RESIDUES

AU Rogers, J. K.; [redacted]mpson, N. S.

SO Carbohyd. Res., (May, 1968) Vol. 7, no. 1, pp. 66-75.

DT Journal

FS PAPERCHEM

LA UNAVAILABLE